Adopt Part Env-Ws 415, effective 10-01-96 (doc. #6346) and expired 10-1-04, as Interim Rules, to read as follows:

PART Env-Ws 415 PERMITS FOR RSA 485-A:17 ACTIVITIES

Statutory Authority: RSA 485-A:6, VIII; RSA 485-A:17

Env-Ws 415.01 Purpose.

(a) The purpose of these rules is to protect surface water quality from degradation resulting from any activity which significantly alters the terrain or occurs in or on the border of the surface waters of the state. Examples of these activities include dredging, earth moving, excavating, timber harvesting operations and mining.

(b) The intent of these rules is to identify those activities for which a permit is required pursuant to RSA 485-A:17 and to delineate the procedures by which the permit shall be issued and enforced. Some of the terminology contained in the law is expanded upon for reasons of clarity with intent being to formulate a workable permit program.

Env-Ws 415.02 Part Definitions. As used herein, the following terms, unless the context clearly indicates otherwise, shall have the following meanings:

(a) "Afterbay" means a pool at the outlet end of a constructed wetland which provides for additional settling of solids and sufficient depth for the outlet pipe.

(b) "Appropriate Best Management Practices" as used in Env-Ws 415.04 means those contained in the manual "Best Management Practices for Erosion Control on Timber Harvesting Operations in New Hampshire" prepared by the New Hampshire department of resources and economic development.

(c) "Borrow area" means an area where soil material is removed to be used in other areas for construction purposes.

(d) "Constructed wetland" means an engineered system designed to simulate the water quality improvement functions of natural wetlands.

(e) "Division" means the water supply and pollution control division of the department of environmental services.

(f) "Earth moving" means filling, grading, dredging, mining, excavation, construction, removal of topsoil or any other activity that results in a change to the preexisting ground conditions.

(g) "Extended detention pond" means a detention structure designed to hold storm water for at least 24 hours.

(h) "Fill" means any rock, soil, gravel, sand, or other such material that has been deposited or caused to be deposited by human activity.

(i) "General permit" means a permit issued by the division pursuant to RSA 485-A:17 in conjunction with a permit issued pursuant to RSA 482-A.

(j) "Grassed swale" means a shallow, vegetated, manmade ditch designed to provide treatment of stormwater runoff from urban surfaces.

(k) "In or on the border of a surface water of the state" means within the high water mark of any surface water, or on any land within such a distance of a surface water that direct or immediate water quality degradation may result from the activities occurring on the land.

(l) "Infiltration basin" means an open basin to which the runoff is discharged and which contains the water while it percolates through the sides and bottom of the basin.

(m) "Infiltration trench" means a subsurface trench filled with stone to which runoff is either piped directly or flows overland, from which it is percolates into the surrounding soil.

(n) "Land surface" means the exposed surface of any land areas including road surfaces, parking lots, air strips, shopping centers, roofs, and any other surface, whether in a natural or developed state, over which runoff flows.

(o) "Logger" means any owner or other person responsible for filing an Intent to Cut form, as required by the department of revenue administration, or otherwise responsible for timber harvesting operations.

(p) "Runoff" means any water on or flowing on or across the land surface.

(q) "Sediment forebay" means a pool at the inlet end of a constructed wetlands which provides for initial settling of solids and even distribution of flow over the wetland.

(r) "Site specific permit" means a permit issued by the division pursuant to RSA 485-A:17 to meet the requirements of Env-Ws 415.03(b).

(s) "Slope" means the incline of a land area, shall be expressed as ratio of the horizontal distance to vertical distance.

(t) "Surface waters of the state" means surface waters of the state as defined in RSA 485-A:2 XIV and includes all waters regulated under RSA 482-A.

(u) "Timber harvesting operations" means the cutting and removal of forest products; the construction of bridges, fords, culverts, roads and landings; skidding, and other similar activities which have the potential to result in a significant alteration of the characteristics of the terrain. Timber harvesting operations shall not include removal of timber or cordwood or other forest products for noncommercial personal use.

(v) "To dredge" means to make a body of water such as a lake, river, channel, harbor, or other area of surface water wider, deeper, or cleaner by the removal of sand, silt, mud, rock, or other such material.

(w) "To excavate" means to dig out and remove, to form a cavity or to form a hole in any land area.

(x) "To mine" means to excavate by dredging, blasting, or any other means which significantly alters the terrain or occurs in or on the borders of the surface waters of the state.

(y) "To significantly alter the characteristics of the terrain" means to undertake any activity anywhere in the state that changes or disturbs the terrain so as to impede the natural runoff or create an unnatural runoff that has the potential to adversely affect water quality in the state's surface waters. Examples of activities which significantly alter the characteristics of the terrain include, but are not limited to earth moving activities which result in a disturbance of more than 100,000 square feet of contiguous area or 50,000 square feet or more of contiguous area if within the protected shoreland as defined in RSA 483-B, and timber harvesting operations.

(z) "To transport forest products" means to move or convey timber and related products within an area bounded by permanent roadways.

(aa) "To undertake construction" means to perform any fabrication of any structure or any appurtenance to a structure, land clearing, earth work, or any activity preliminary to fabricating such structure or appurtenance which involves a significant alteration of the characteristics of the terrain or which occurs in or on the border of the surface waters of the state.

(bb) "Vegetated filter strip" means an area of land with natural or planted vegetation designed to receive sheet runoff from up-gradient development.

(cc) "Water quality inlet" means an underground, multi-chambered tank designed to remove sediments from and reduce the amount of floatable solids in runoff, and includes oil and grit separators.

(dd) "Wet pond" means an area designed to contain a permanent pool of water, which prevents the resuspension of sediments in the pond from previous storm events, by slowing and disbursing incoming flow.

Env-Ws 415.03 Permit Required. A permit shall be obtained from the division prior to commencing any of the following activities:

(a) Any project involving dredging, excavation, filling, mining, transporting of forest products, construction, earth moving or other significant alteration of the characteristics of the terrain as defined in Env-Ws 415.02 that will occur in or on the border of the surface waters of the state;

(b) Construction, earth moving or other significant alteration of the characteristics of the terrain as defined Env-Ws 415.02 when a contiguous area of 50,000 square feet or more if within the protected shoreline as defined by RSA 483-B or 100,000 square feet or more in all other areas will be disturbed; or

Env-Ws 415.04 Timber Harvesting Operations. In the instance of timber harvesting operations, each logger shall obtain a site specific permit by signing the following statement as it appears on the "Intent to Cut" form of the department of revenue administration:
"I, , having become familiar with RSA 485-A:17, RSA 224:44a, 224:44b, 482-A and related rules, hereby agree to abide by appropriate Best Management Practices to include all state laws pertaining to logging operations."

Env-Ws 415.05 Permit Application Procedures.

(a) Applications for permits shall be submitted to the division at the following address:

DES Water Supply & Pollution Control Division
29 Hazen Drive - P.O. Box 95
Concord, New Hampshire 03302-0095

(b) Application forms shall be available at the public information and permitting office of the department of environmental services. The division shall mail an application form, instructions and a copy of the applicable statute and rules to any person who so requests.

(c) An application for a permit, other than general permits shall include the following:

(1) One copy of the application form which shall include the following information:

a. Applicant's name;

b. Applicant's address

c. Date of application;

d. Brief description of project;

e. Date of proposed activities;

f. Identification of plan type required according to Env-Ws 415.08; and

(2) Two copies of plans as specified in Env-Ws 415.08 through Env-Ws 415.10 for the specific project.

(d) Pursuant to RSA 485-A:17,I, applications filed pursuant to these rules shall be filed at least 30 days prior to the proposed starting date of the proposed activities and no activities shall commence without prior approval of the application by the division.

(e) Upon receipt of an application the division shall send notice to affected municipalities in accordance with RSA 541-A:39

(f) The notice sent pursuant to (e) above shall specify the deadline for receipt of comments on the application from the municipality, which shall not be sooner than 14 days from the date the division receives the application.

Env-Ws 415.06 Fees for Plan Review. Each application filed pursuant to these rules shall be accompanied by the fee required by RSA 485-A:17, II as determined pursuant to Env-Ws 415.14.

Env-Ws 415.07 Criteria for Review. Each permit application, except general permit applications, shall be reviewed for the following:

(a) Water quality protection measures proposed to be used during the construction phase of the proposed activity for the prevention of soil erosion;

(b) Permanent water quality protection measures to be constructed as part of the project in accordance with Env-Ws 415.11; and

(c) Impacts due to changes in runoff hydrology, determined in accordance with Env-Ws 415.11(m).

Env-Ws 415.08 Types of Plans Required.

(a) A site plan shall be submitted for projects involving only excavation activities.

(b) A detailed development plan shall be submitted for all projects requiring a site specific application other than those covered by section (a) of this part. Detailed development plans shall be prepared and stamped by a licensed professional engineer.

Env-Ws 415.09 Details of Site Plans. Each site plan shall include:

(a) United States Geological Survey Sheet(s), either machine copy or other facsimile, showing exact location(s) of projects for which a permit is being requested;

(b) A plan to scale showing the direction of water flow, maximum high-water mark and usual shorelines, natural features, adjacent roads, and structures in relation to all abutters, at a scale appropriate for clarity;

(c) Appropriate maps to scale of the area of activity and any abutting or nearby properties the drainage from which might impact the drainage characteristics of the area, at a scale of one inch = 100 feet or less, as required, to present the required detail;

(d) All contours at 5 foot intervals or less for site as existing, and following the proposed activity;

(e) Site limits, streets, roadways, parking areas, waterways, structures and drainage features of abutters that may impact the site;

(f) Soil types;

(g) Location of existing vegetative cover, and location of wetland or wet areas;

(h) A clear delineation of the total area to be disturbed, including proposed improvements or modifications;

(i) Temporary and permanent methods of preventing soil erosion;

(j) Construction phasing and sequencing, including methods for limiting the length of time of exposure of unstabilized soils;

(k) Proposed temporary and permanent runoff controls;

(l) Proposed permanent methods for protecting water quality from degradation due to runoff; and

(m) A list of other permits required by the department of environmental services for the project and the status of each permit or permit application.

Env-Ws 415.10 Details of Development Plans. Each detailed development plan shall include:

(a) All information required for site plans, with the exception that the plan scale shall be one inch = 50 feet or less and the contour interval shall be 2 feet;

(b) Devices and timing of implementation for erosion, sediment and runoff control;

(c) Detailed pre - and post-development drainage and grading plans; and

(d) Proposed permanent methods for protecting water quality from degradation due to runoff from paved surfaces, roofs, roadways, parking lots, commercial/industrial areas and other developed surfaces.

Env-Ws 415.11 Permanent Methods for Protecting Water Quality.

(a) For vegetated filter strips:

(1) Filter strip shall be well vegetated;

(2) Filter strip shall not be managed as a lawn;

(3) The filter strip shall directly abut the impervious area or a level spreader shall be constructed at the top of the strip to distribute the flow;

(4) The rate of flow to the filter strip shall not exceed 0.5 cubic feet per second per foot of filter strip width, during a design storm with a minimum return frequency of once in two years;

(5) Filter strip slope shall not exceed 15 percent; and

(6) The minimum width of the filter strip shall be 75 feet.

(b) For grassed swales:

(1) Minimum length shall be 100 feet;

(2) Swale side slopes shall be no-steeper than 3:1;

(3) Maximum water velocity during a design storm with a return frequency of once in 10 years, shall be one foot per second;

(4) Maximum flow during a design storm with a minimum return frequency of once in ten years shall be 10 cubic feet per second;

(5) Swale shall be vegetated with a dense cover of water tolerant, erosion resistant grasses; and

(6) The bottom of the swale shall be at least two feet above the seasonal high water table and bedrock.

(c) For extended detention ponds:

(1) A minimum of 24 hours of extended detention shall be provided for a design storm with a minimum return frequency of once in two years;

(2) Smaller runoff events shall be detained in the pond for at least six hours. Longer detention periods shall be provided if needed for streambank erosion control;

(3) The pond shall be designed with a drawdown time of 24 to 40 hours;

(4) A 2 stage pond design shall be used, as follows:

a. The upper stage shall be dry except during larger storm events, and the lower stage shall be sized to be regularly inundated; and

b. The lower stage shall be designed to handle 50 to 90 percent of the design storm;

(5) A stone lined pilot channel shall be constructed from the inlet to the lower stage;

(6) The pond shall be wedge shaped with the inlet at the narrow end;

(7) The minimum length to width ratio of the pond shall be 3:1, with the inlet and outlet at opposite ends of the pond; and

(8) Side slopes of the pond shall be no steeper that 3:1 and no flatter than 20:1.

(d) For wet ponds:

(1) Wet ponds shall have an average depth of 3 to 10 feet in the permanent pool;

(2) The maximum depth shall be no greater than 15 feet;

(3) The permanent pool shall be designed to hold the volume of runoff generated by a design storm with a minimum return frequency of once in two years over the entire contributing watershed area;

(4) Sediment storage shall be provided in the permanent pool;

(5) At least one foot of ice cover shall be provided for;

(6) The pond shall be wedged shaped with the narrow end at the inlet and the permanent pool at the outlet end;

(7) The minimum length to width ratio shall be 3:1, with the inlet and outlet at opposite ends of the pond;

(8) Ponds shall have side slopes no steeper than 3:1 nor flatter than 20:1; and

(9) A hydrologic budget shall be prepared demonstrating that sufficient water is available to maintain the water depth in the permanent pool.

(e) For constructed wetlands:

(1) The volume of storage capacity below the outlet shall be equal to a one inch rainfall over the tributary area;

(2) Surface area of the wetland shall be a minimum of 2% of the watershed area;

(3) The wetland shall have 2 micropools comprising between 20 and 40% of the total wetland water volume, as follows:

a. The first micropool shall be a sediment forebay and shall contain 10 percent of the total wetland water volume;

b. The second micropool shall be an afterbay and shall contain 10 to 30 percent of the total wetland water volume; and

c. The micropools shall be a minimum of 3 feet and a maximum of 6 feet deep.

(4) The wetland between the two micropools shall be a marsh with variable depth between 6 inches and 2 feet;

(5) The outlet of the sediment forebay to the marsh shall be designed to evenly distributed the flow over the marsh;

(6) The length of the basin shall be at least twice the width, or other means provided to prevent short circuiting of flow;

(7) A hydrologic budget shall be prepared that demonstrates that sufficient water is available to maintain the wetland, and that the wetland will not be inundated with an excess of water;

(8) The marsh portion of the wetland shall be designed with a dense, well distributed stand of vegetation such as cattails;

(9) Maximum sideslopes shall be 3:1; and

(10) The constructed wetlands shall have a freeboard of at least one foot.

(f) For infiltration trenches:

(1) Stone reservoir depth shall be from 2 to 10 feet. A trench with a grassed surface shall consist of at least one foot of soil above the stone reservoir;

(2) The maximum storage time, or the time to drain, shall be 72 hours;

(3) The depth to seasonal high water table and bedrock shall be at least 4 feet below the bottom of the trench;

(4) The backfill material shall consist of a clean aggregate material with a maximum size of 2 inches and a minimum size of 3/4 inches, which shall be completely surrounded with geotextile fabric.

(5) An observation well shall be installed in every infiltration trench;

(6) Infiltration trenches shall not be used at industrial facilities or at petroleum storage and/or dispensing sites, unless a source control program is developed and implemented, pursuant to RSA 485-C; and

(7) Infiltration trenches shall be designed for a storm with a minimum return frequency of once in two years.

(g) For infiltration basins:

(1) The floor of the basin shall be level;

(2) Side-slopes shall have a maximum slope of 3:1;

(3) The basin shall have sediment forebay or riprap apron;

(4) The maximum storage time, or the time to drain, shall be 72 hours;

(5) The depth to seasonal high water table and bedrock shall be at least 4 feet below the bottom of the basin;

(6) Infiltration basins shall not be used at industrial facilities and at petroleum storage and/or dispensing sites, unless a source control program is developed and implemented, pursuant to RSA 485-C; and

(7) Infiltration basins shall be designed for storm with a minimum return frequency of once in two years.

(h) For water quality inlets:

(1) Water quality inlets shall be a 3-chamber design with the first and second chambers having a combined volume equal to 400 cubic feet per contributing impervious acre;

(2) Access to each chamber shall be provided by means of a separate manhole; and

(3) The walls separating the chambers shall be water tight and only allow passage of stormwater through the design ports or pipes.

(i) Infiltration basins, infiltration trenches and water quality inlets shall only be used where other methods are not feasible.

(j) Other permanent methods for protecting water quality shall be approved by the division provided the applicant can provide to the division analytical data from at least 3 sites with climatological characteristics similar to New Hampshire indicating the proposed method is equivalent to the methods found in Env-Ws 415.11(a) through Env-Ws 415.11(h).

(k) Direct infiltration of stormwater shall not be used at industrial sites or at petroleum storage or dispensing sites within 500 feet of a well serving a community or non-community, non-transient public water supply as defined in RSA 485:1-a which produces a maximum daily volume of less than 57,600 gallons and 1000 feet from any such well which produces a maximum daily volume of 57,600 gallons or greater.

(l) The methods, means and responsible party for maintaining the water quality protection measures shall be identified in the application.

(m) Stormwater drainage shall be calculated for pre- and post-- construction, for storms with minimum return frequencies of once in 2 years and of once in 10 years using the "Rational Method," Technical Release 20 (TR20) or Technical Release 55 (TR55), developed by the

USDA-Natural Resources Conservation Service, for determining the rate of runoff, subject to the following:

(1) The time of concentration (Tc) shall be determined by methods developed or endorsed by the USDA-Natural Resources Conservation Service, except for the design of a closed drainage system conveying parking lot and roadway runoff, for which other methods for determining Tc shall be acceptable; and

(2) When the stormdrainage design requires the calculation of a stormwater volume such as in the design of detention/retention ponds, wet ponds, constructed wetlands, or infiltration devices the calculations shall be made by TR20 or TR55.

Env-Ws 415.12 Waivers for submittal of Information.

(a) In those instances where there exists a low potential for a water quality violation, the applicant may request that one or more of the information items required by Env-Ws 415.09 and Env-Ws 415.10 be waived.

(b) Such requests shall be submitted to the division in writing with the application and shall state the reason(s) why the information required by the section(s) is not necessary to a determination that the project will not cause surface water quality degradation.

(c) No waiver shall be granted unless the division determines that the information is not necessary to its determination that the project will not cause surface water quality degradation, based on the following criteria:

(1) Waiver of information will result in an easier to understand plan;

(2) Information to be waived does not add to the understanding of the project; and

(3) Information to be waived is technical in nature.

Env-Ws 415.13 Issuance of Permits.

(a) Upon determining that the items required by Env-Ws 415.05, Env-Ws 415.09 and Env-Ws 415.10 have been submitted, or waived under Env-Ws 415.12, and that the criteria specified in Env-Ws 415.07 have been met, the division shall issue a permit to the applicant.

(b) The approved plans and documentation contained in the permit file shall be considered part of the permit.

Env-Ws 415.14 Measurement of Contiguous Area Disturbed. The amount of contiguous area disturbed used to assess fees shall be determined as follows:

(a) For single family residence subdivisions in which roadway construction and lot development will not be carried out simultaneously, the amount of contiguous disturbed area

shall be the width of the roadway right-of-way multiplied by the length of the roadway, plus all other areas disturbed at the time of roadway construction, such as grading, utility construction, pond construction or borrow areas.

(b) For all projects other than those covered in subsection (a), the amount of contiguous area disturbed shall be the proposed area of disturbance as outlined on the plans submitted for review. Any disturbance outside the area depicted on the plan shall be considered an unpermitted disturbance.

Env-Ws 415.15 General Permits.

(a) Any person proposing to undertake activities affecting an area of less than 100,000 square feet in or on the borders of surface waters of the state which area is under the jurisdiction of RSA 482-A shall apply for a permit pursuant to RSA 482-A and rules adopted pursuant thereto. Upon review and approval of the application, a joint or general permit shall be issued.

(b) General permits shall be effective for the life of the project, but in no event for more than 2 years.

Env-Ws 415.16 Permit Suspension or Revocation. Upon finding that information submitted as part of a permit application for which a permit has been issued is incorrect, misleading, incomplete or otherwise deficient, the division shall take the following action:

(a) If the division determines that the deficient information was submitted inadvertently or negligently, the division shall suspend the permit and allow the permit holder a reasonable time in which to submit adequate and correct information, and shall notify the permit holder that if the information is not submitted within the time specified, the permit shall be revoked. A decision to suspend a permit shall not be considered a final decision from which an appeal may be taken.

(b) If the division determines that the deficient information was submitted with the intention to mislead or to avoid one or more requirements of the statute or rules, or if the permit holder does not submit the information required under subsection (a) for a suspended permit within the time specified, the division shall revoke the permit.

Env-Ws 415.17 Appeal Procedure. Any person aggrieved by a final decision of the division made pursuant to these rules may appeal the decision pursuant to RSA 21-O:14.

Env-Ws 415.18 Change of Ownership.

(a) Within 10 days of a change of ownership of a project site, the new owner shall notify the division of the change of ownership by submitting the following information:

(1) The name and full mailing address of the new owner;

(2) If the new owner is a corporation, partnership, trust, or any other entity except an individual, the name and full mailing address of the person representing the for the project with whom the division can communicate regarding the project;

(3) The name and full mailing address of the former owner; and

(4) The permit number and site location, including street name and number, if any, and town or city in which the site is located.

(b) Upon receipt of the information required in subsection (a), the division shall amend the permit to reflect the change in ownership and shall send a copy of the amended permit to the new owner.

Env-Ws 415.19 Permit Expiration and Renewal.

(a) All permits issued under the authority of RSA 485-A:17, except for permits issued for excavation projects only, on or after the effective date of these rules shall expire 2 years from the date of issuance unless a written request for extension is submitted to the division within 90 days of the expiration date. No work shall be done on the project after the expiration of the permit unless the division has extended the permit in accordance with this section.

(b) The written request for extension shall specify the reason(s) why the extension is being sought and shall state, if true, that no changes to the original permit application and plans have been, are being or will be made, and that the project as originally proposed and permitted meets all current requirements of these rules.

(c) If changes to the original permit application have been, are being or will be made, the permit holder shall identify the changes and, if applicable, shall submit amended plans meeting the requirements of these rules showing the changes.

(d) Permits for excavation projects only shall not expire for the life of the project identified in the permit application, provided that the division receives a written update of the project status every 2 years from the date of the permit and receives plans revised to show the present project status every 6 years from the date of the permit. Revised plans shall conform to all technical requirements in existence at the time the permit was issued.

(e) If the division determines that the requested extension will not violate any statute or rule and will not cause or threaten any degradation of surface water quality, then the division shall extend the permit for a reasonable amount of time, based on considerations of the amount of work left to be done on the project and weather or other seasonal factors.

Appendix

Rule	Statute Rule is Intended to Implement
Env-Ws 415	RSA 485-A:17